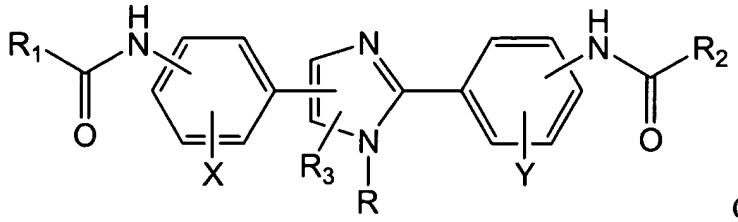
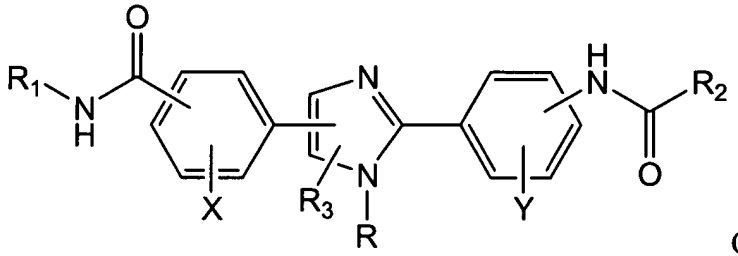
WHAT IS CLAIMED IS:

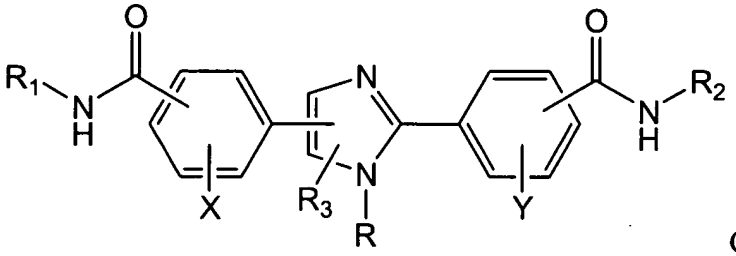
1. A pharmaceutical composition for treating or preventing an allergic reaction associated with increased IgE levels or inhibiting cellular proliferation in a mammal comprising any one or more of the following compounds:



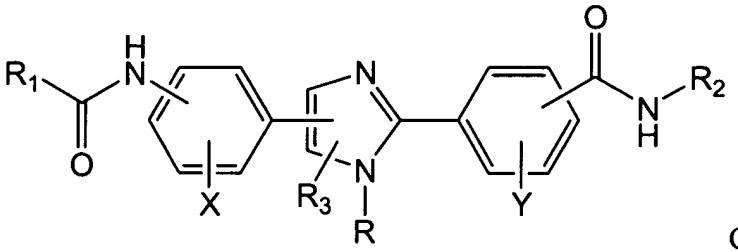
Genus 1;



Genus 2;



Genus 3; and



Genus 4;

wherein R is selected from the group consisting of H, C_1-C_5 alkyl, benzyl, p-fluorobenzyl, and dialkylaminoalkyl, wherein said C_1-C_5 alkyl is selected from the group consisting of a straight chain, branched or cyclic alkyl;

wherein R_3, X, and Y are independently selected from the group consisting of H, halogen, alkoxy, substituted alkoxy, alkyl, substituted alkyl, dialkylaminoalkyl, hydroxyalkyl, OH, OCH_3, COOH, CN, CF_3, OCF_3, NO_2, COOR", CHO, and COR";

wherein R_1 and R_2 are independently selected from the group consisting of H, alkyl, substituted alkyl, C_3-C_9 cycloalkyl, substituted C_3-C_9 cycloalkyl, polycyclic aliphatic groups, phenyl, substituted phenyl, naphthyl, substituted naphthyl, heterocyclic, and substituted heterocyclic, wherein said heterocyclic and said substituted heterocyclic contain 1-3 heteroatoms, wherein said heteroatom is independently selected from the group consisting of nitrogen, oxygen and sulfur;

wherein said substituents are selected from the group consisting of H, halogen, alkoxy, substituted alkoxy, alkyl, substituted alkyl, dialkylaminoalkyl, hydroxyalkyl, OH, OCH_3, COOH, COOR′ COR′, CN, CF_3, OCF_3, NO_2, NR′R′, NHCOR′ and CONR′R′;

wherein R′ is selected from the group consisting of H, alkyl, substituted alkyl, C_3-C_9 cycloalkyl, substituted C_3-C_9 cycloalkyl, polycyclic aliphatic groups, phenyl, substituted phenyl, naphthyl, substituted naphthyl, heteroaryl and substituted heteroaryl, wherein said heteroaryl and said substituted heteroaryl contain 1-3 heteroatoms, wherein said heteroatom is independently selected from the group consisting of nitrogen, oxygen and sulfur; and

wherein R" is selected from the group consisting of C_1-C_9 alkyl, wherein said C_1-C_9 alkyl is selected from the group consisting of straight chain alkyl, branched alkyl, and cyclic alkyl.

2. The compound of Claim 1, wherein said polycyclic aliphatic group is selected from the group consisting of adamantyl, bicycloheptyl, camphoryl, bicyclo[2,2,2]octanyl, and norbornyl.

3. The compound of Claim 1, wherein said heterocyclic and said substituted heterocyclic is selected from the group consisting of pyridines, thiazoles, isothiazoles, oxazoles, pyrimidines, pyrazines, furans, thiophenes, isoxazoles, pyrroles, pyridazines, 1,2,3-triazines, 1,2,4-triazines, 1,3,5-triazines, pyrazoles, imidazoles, indoles, quinolines, isoquinolines, benzothiophines, benzofurans, parathiazines, pyrans, chromenes, pyrrolidines,

pyrazolidines, imidazolidines, morpholines, thiomorpholines, and the corresponding saturated heterocyclics.

4. The pharmaceutical composition of Claim 1, further comprising at least one additional ingredient which is active in reducing at least one symptom associated with said allergic reaction, cell proliferation and/or inhibition of cytokines or leukocytes.

5. A method for treating or preventing an allergic reaction and/or for inhibiting cytokines or leukocytes in a mammal wherein said reaction is caused by an increase in IgE levels comprising administering an IgE-suppressing amount of at least one compound of Claim 1.

6. The method of Claim 5 further comprising administering at least one additional ingredient which is active in reducing at least one symptom associated with said allergic reaction.

7. The method of Claim 6, wherein said at least one additional ingredient is selected from the group consisting of a short-acting β_2-adrenergic agonist, a long-acting β_2-adrenergic agonist, an antihistamine, a phosphodiesterase inhibitor, an anticholinergic agent, a corticosteroid, an inflammatory mediator release inhibitor and a leukotriene receptor antagonist.

8. The method of Claim 6, wherein said at least one additional ingredient is combined with said at least one IgE-suppressing compound in a pharmaceutically acceptable diluent and co-administered to the mammal.

9. The method of Claim 8, wherein said at least one IgE-suppressing compound is administered at a dose of about 0.01 mg to about 100 mg per kg body weight per day.

10. The method of Claim 9, wherein said dose is administered in divided doses at regular periodic intervals.

11. The method of Claim 10, wherein said regular periodic intervals occur daily.

12. A method for treating or preventing asthma in a mammal comprising administering an IgE-suppressing amount of at least one compound of Claim 1.

13. The method of Claim 12 further comprising administering at least one additional ingredient which is active in reducing at least one symptom associated with said asthma.

14. The method of Claim 13, wherein said additional ingredient is selected from the group consisting of a short-acting β_2-adrenergic agonist, a long-acting β_2-adrenergic

agonist, an antihistamine, a phosphodiesterase inhibitor, an anticholinergic agent, a corticosteroid, an inflammatory mediator release inhibitor and a leukotriene receptor antagonist.

15. A method for inhibiting cellular proliferation in a mammal comprising administering an amount of at least one compound of Claim 1.

16. The method of Claim 15 further comprising administering at least one additional ingredient which is active in reducing at least one symptom associated with said cellular proliferation.

17. The method of Claim 16, wherein said at least one additional ingredient is selected from the group consisting of antifungals, antivirals, antibiotics, anti-inflammatories, and anticancer agents.

18. The method of Claim 16, wherein said at least one additional ingredient is selected from the group consisting of alkylating agent, antimetabolite, DNA cutter, topoisomerase I poison, topoisomerase II poison, DNA binder, and spindle poison.

19. The method of Claim 16, wherein said at least one additional ingredient is combined with said at least one compound of Claim 1 in a pharmaceutically acceptable diluent and co-administered to the mammal.

20. The method of Claim 19, wherein said at least one compound of Claim 1 is administered at a dose of about 0.01 mg to about 100 mg per kg body weight per day.

21. The method of Claim 20, wherein said dose is administered in divided doses at regular periodic intervals.

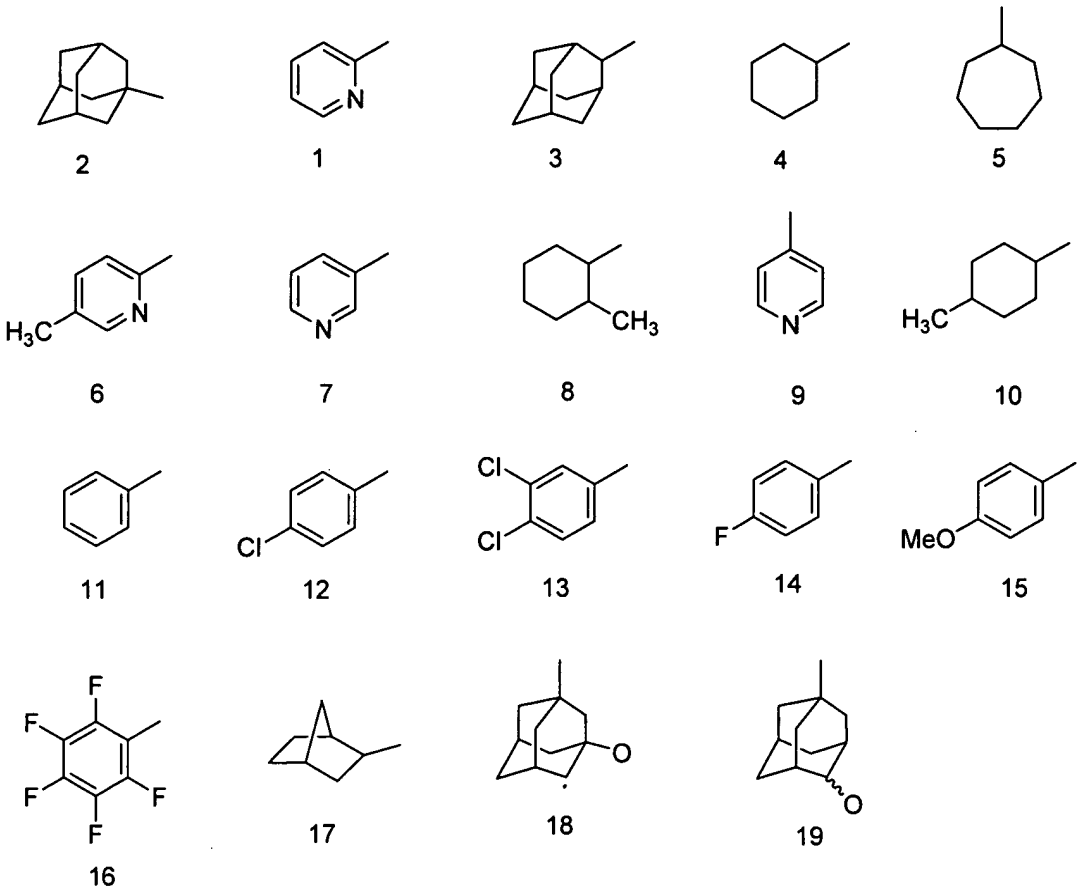
22. The method of Claim 21, wherein said regular periodic intervals occur daily.

23. The method of Claim 15 further comprising administering at least one other therapy which is effective in ameliorating at least one symptom associated with cellular hyperproliferation.

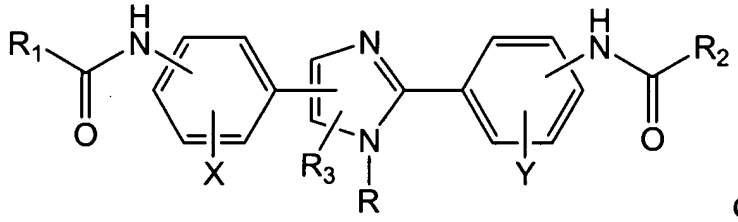
24. The method of Claim 23, wherein said therapy is an anti-cancer therapy.

25. The method of Claim 23, wherein said therapy is selected from the group consisting of radiation, immunotherapy, gene therapy, and surgery.

26. The pharmaceutical composition of Claim 1, wherein R_1 and R_2 are independently selected from Genera 1-4, preferred substituents for R_1 and R_2 are selected from the following:



27. A method of preparing a compound or salt thereof having the formula:



Genus 1;

wherein R is selected from the group consisting of H, C_1-C_5 alkyl, benzyl, p-fluorobenzyl, and dialkylaminoalkyl, wherein said C_1-C_5 alkyl is selected from the group consisting of a straight chain, branched or cyclic alkyl;

wherein R_3, X, and Y are independently selected from the group consisting of H, halogen, alkoxy, substituted alkoxy, alkyl, substituted alkyl, dialkylaminoalkyl, hydroxyalkyl, OH, OCH_3, COOH, CN, CF_3, OCF_3, NO_2, COOR", CHO, and COR";

wherein R_1 and R_2 are independently selected from the group consisting of H, alkyl, substituted alkyl, C_3-C_9 cycloalkyl, substituted C_3-C_9 cycloalkyl, polycyclic aliphatic groups, phenyl, substituted phenyl, naphthyl, substituted naphthyl, heterocyclic, and substituted heterocyclic, wherein said heterocyclic and said substituted heterocyclic contain 1-3 heteroatoms, wherein said heteroatom is independently selected from the group consisting of nitrogen, oxygen and sulfur;

wherein said substituents are selected from the group consisting of H, halogen, alkoxy, substituted alkoxy, alkyl, substituted alkyl, dialkylaminoalkyl, hydroxyalkyl, OH, OCH_3, COOH, COOR′ COR′, CN, CF_3, OCF_3, NO_2, NR′R′, NHCOR′ and CONR′R′;

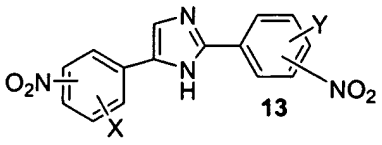
wherein R′ is selected from the group consisting of H, alkyl, substituted alkyl, C_3-C_9 cycloalkyl, substituted C_3-C_9 cycloalkyl, polycyclic aliphatic groups, phenyl, substituted phenyl, naphthyl, substituted naphthyl, heteroaryl and substituted heteroaryl, wherein said heteroaryl and said substituted heteroaryl contain 1-3 heteroatoms, wherein said heteroatom is independently selected from the group consisting of nitrogen, oxygen and sulfur; and

wherein R" is selected from the group consisting of C_1-C_9 alkyl, wherein said C_1-C_9 alkyl is selected from the group consisting of straight chain alkyl, branched alkyl, and cyclic alkyl;

wherein said method comprises steps:

converting a Y-substituted-nitro-benzonitrile to a Y-substituted nitro-benzamidine;

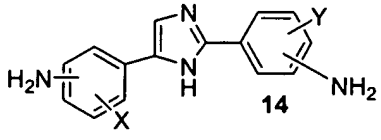
reacting the Y-substituted nitro-benzamidine with X-substituted nitro-phenacyl halide to form a species of the formula **13**



13

;

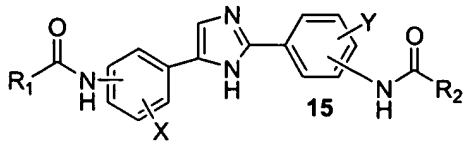
reducing the species of the formula **13** to form a species of the formula **14**



14

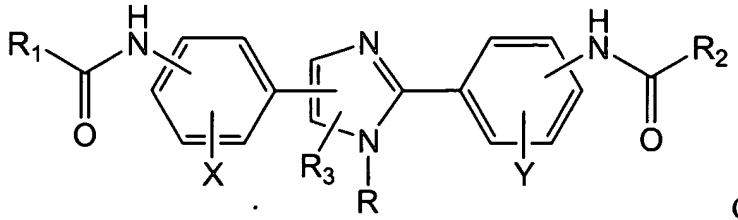
; and

acylating the species of the formula **14** to form a species of the formula **15**



15

28. A method of preparing a compound or salt thereof having the formula:



Genus 1;

wherein R is selected from the group consisting of H, C_1-C_5 alkyl, benzyl, p-fluorobenzyl, and dialkylaminoalkyl, wherein said C_1-C_5 alkyl is selected from the group consisting of a straight chain, branched or cyclic alkyl;

wherein R_3, X, and Y are independently selected from the group consisting of H, halogen, alkoxy, substituted alkoxy, alkyl, substituted alkyl, dialkylaminoalkyl, hydroxyalkyl, OH, OCH_3, COOH, CN, CF_3, OCF_3, NO_2, COOR", CHO, and COR";

wherein R_1 and R_2 are independently selected from the group consisting of H, alkyl, substituted alkyl, C_3-C_9 cycloalkyl, substituted C_3-C_9 cycloalkyl, polycyclic aliphatic groups, phenyl, substituted phenyl, naphthyl, substituted naphthyl, heterocyclic, and substituted heterocyclic, wherein said heterocyclic and said substituted heterocyclic contain 1-3 heteroatoms, wherein said heteroatom is independently selected from the group consisting of nitrogen, oxygen and sulfur;

wherein said substituents are selected from the group consisting of H, halogen, alkoxy, substituted alkoxy, alkyl, substituted alkyl, dialkylaminoalkyl, hydroxyalkyl, OH, OCH_3, COOH, COOR′ COR′, CN, CF_3, OCF_3, NO_2, NR′R′, NHCOR′ and CONR′R′;

wherein R′ is selected from the group consisting of H, alkyl, substituted alkyl, C_3-C_9 cycloalkyl, substituted C_3-C_9 cycloalkyl, polycyclic aliphatic groups, phenyl, substituted phenyl, naphthyl, substituted naphthyl, heteroaryl and substituted heteroaryl, wherein said heteroaryl and said substituted heteroaryl contain 1-3

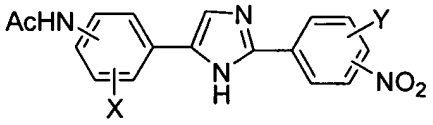
heteroatoms, wherein said heteroatom is independently selected from the group consisting of nitrogen, oxygen and sulfur; and

wherein R" is selected from the group consisting of C_1-C_9 alkyl, wherein said C_1-C_9 alkyl is selected from the group consisting of straight chain alkyl, branched alkyl, and cyclic alkyl;

wherein said method comprises steps:

converting a Y-substituted nitro-benzonitrile to a Y-substituted nitro-benzamidine;

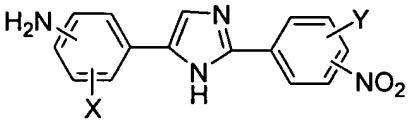
reacting the Y-substituted nitro-benzamidine with X-substituted acetamido-



74

phenacyl halide to form species of the formula **74** ;

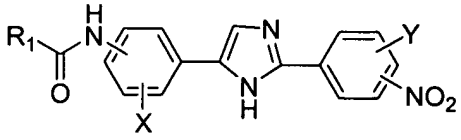
hydrolyzing the species of the formula **74** to form a species pf the formula



75

75 ;

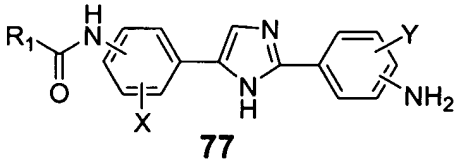
acylating the species of the formula **75** to from a species of the formula **76**



76

;

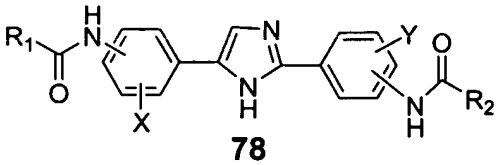
reducing the species of the formula **76** to form a species of the formula **77**



77

; and

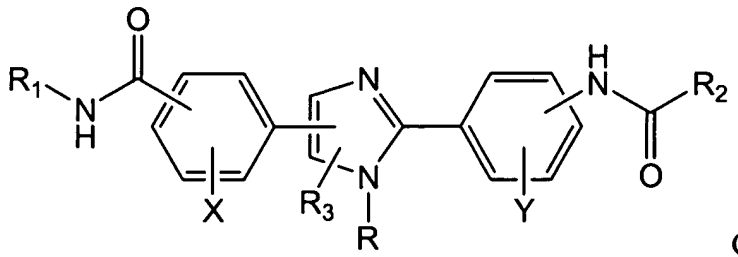
acylating the species of the formula **77** to from a species of the formula



78

78 .

29. A method of preparing a compound or salt thereof having the formula:



Genus 2;

wherein R is selected from the group consisting of H, C_1-C_5 alkyl, benzyl, p-fluorobenzyl, and dialkylaminoalkyl, wherein said C_1-C_5 alkyl is selected from the group consisting of a straight chain, branched or cyclic alkyl;

wherein R_3, X, and Y are independently selected from the group consisting of H, halogen, alkoxy, substituted alkoxy, alkyl, substituted alkyl, dialkylaminoalkyl, hydroxyalkyl, OH, OCH_3, COOH, CN, CF_3, OCF_3, NO_2, COOR", CHO, and COR";

wherein R_1 and R_2 are independently selected from the group consisting of H, alkyl, substituted alkyl, C_3-C_9 cycloalkyl, substituted C_3-C_9 cycloalkyl, polycyclic aliphatic groups, phenyl, substituted phenyl, naphthyl, substituted naphthyl, heterocyclic, and substituted heterocyclic, wherein said heterocyclic and said substituted heterocyclic contain 1-3 heteroatoms, wherein said heteroatom is independently selected from the group consisting of nitrogen, oxygen and sulfur;

wherein said substituents are selected from the group consisting of H, halogen, alkoxy, substituted alkoxy, alkyl, substituted alkyl, dialkylaminoalkyl, hydroxyalkyl, OH, OCH_3, COOH, COOR′ COR′, CN, CF_3, OCF_3, NO_2, NR′R′, NHCOR′ and CONR′R′;

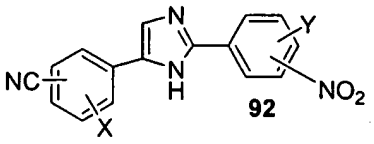
wherein R′ is selected from the group consisting of H, alkyl, substituted alkyl, C_3-C_9 cycloalkyl, substituted C_3-C_9 cycloalkyl, polycyclic aliphatic groups, phenyl, substituted phenyl, naphthyl, substituted naphthyl, heteroaryl and substituted heteroaryl, wherein said heteroaryl and said substituted heteroaryl contain 1-3 heteroatoms, wherein said heteroatom is independently selected from the group consisting of nitrogen, oxygen and sulfur; and

wherein R" is selected from the group consisting of C_1-C_9 alkyl, wherein said C_1-C_9 alkyl is selected from the group consisting of straight chain alkyl, branched alkyl, and cyclic alkyl;

wherein said method comprises the following steps:

converting a Y-substituted-nitro-benzonitrile to a Y-substituted nitro-benzamidine;

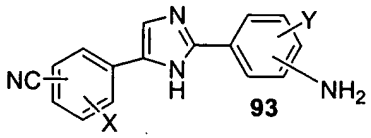
reacting the Y-substituted nitro-benzamidine with X-substituted cyano-phenacyl halide to form a species of the formula **92**



92

;

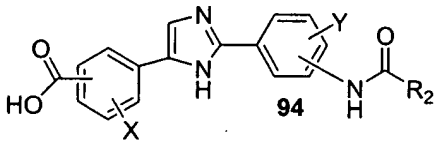
reducing the species of the formula **92** to form a species of the formula **93**



93

;

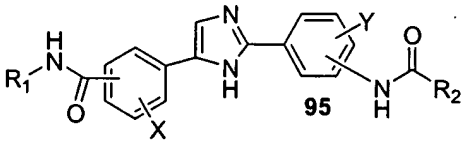
acylating the species of the formula **93** and subsequently performing a hydrolysis to form a species of the formula **94**



94

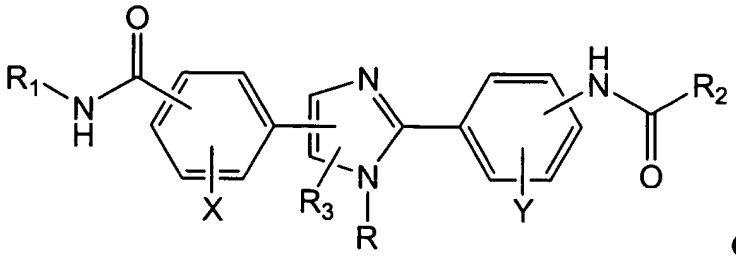
; and

aminating the species of the formula **94** to form a species of the formula **95**



95

30. A method of preparing a compound or salt thereof having the formula:



Genus 2;

wherein R is selected from the group consisting of H, C_1-C_5 alkyl, benzyl, p-fluorobenzyl, and dialkylaminoalkyl, wherein said C_1-C_5 alkyl is selected from the group consisting of a straight chain, branched or cyclic alkyl;

wherein R_3, X, and Y are independently selected from the group consisting of H, halogen, alkoxy, substituted alkoxy, alkyl, substituted alkyl, dialkylaminoalkyl, hydroxyalkyl, OH, OCH_3, COOH, CN, CF_3, OCF_3, NO_2, COOR", CHO, and COR";

wherein R_1 and R_2 are independently selected from the group consisting of H, alkyl, substituted alkyl, C_3-C_9 cycloalkyl, substituted C_3-C_9 cycloalkyl, polycyclic aliphatic groups, phenyl, substituted phenyl, naphthyl, substituted naphthyl, heterocyclic, and substituted heterocyclic, wherein said heterocyclic and said substituted heterocyclic contain 1-3 heteroatoms, wherein said heteroatom is independently selected from the group consisting of nitrogen, oxygen and sulfur;

wherein said substituents are selected from the group consisting of H, halogen, alkoxy, substituted alkoxy, alkyl, substituted alkyl, dialkylaminoalkyl, hydroxyalkyl, OH, OCH_3, COOH, COOR′ COR′, CN, CF_3, OCF_3, NO_2, NR′R′, NHCOR′ and CONR′R′;

wherein R′ is selected from the group consisting of H, alkyl, substituted alkyl, C_3-C_9 cycloalkyl, substituted C_3-C_9 cycloalkyl, polycyclic aliphatic groups, phenyl, substituted phenyl, naphthyl, substituted naphthyl, heteroaryl and substituted heteroaryl, wherein said heteroaryl and said substituted heteroaryl contain 1-3 heteroatoms, wherein said heteroatom is independently selected from the group consisting of nitrogen, oxygen and sulfur; and

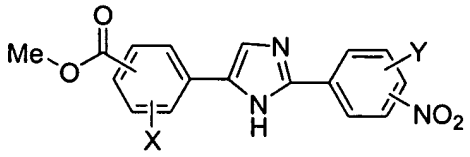
wherein R" is selected from the group consisting of C_1-C_9 alkyl, wherein said C_1-C_9 alkyl is selected from the group consisting of straight chain alkyl, branched alkyl, and cyclic alkyl;

wherein said method comprises the following steps:

converting a Y-substituted nitro-benzonitrile to a Y-substituted nitro-benzamidine;

converting methyl X-substituted 4-acetyl benzoate to a methyl X-substituted 4-(alpha-bromoacetyl) benzoate;

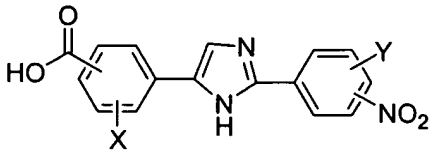
reacting the Y-substituted nitro-benzamidine with methyl X-substituted 4-(alpha-bromoacetyl) benzoate to form species of the formula **103**



103

;

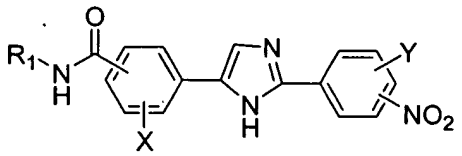
hydrolyzing the species of the formula **103** to form a species of the formula



104

;

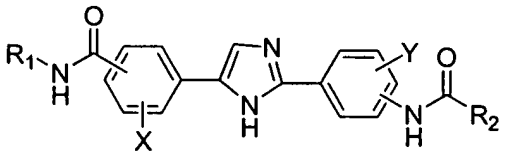
aminating the species of the following formula **104** to form a species of the



105

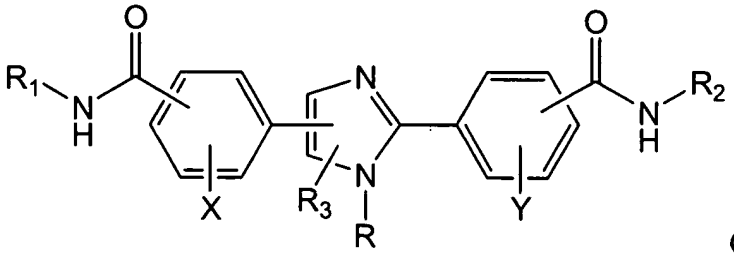
formula **105** ; and

reducing and amidating the formula **105** to form a species of the formula **106**



106

31. A method of preparing a compound or salt thereof having the formula:



Genus 3;

wherein R is selected from the group consisting of H, C_1-C_5 alkyl, benzyl, p-fluorobenzyl, and dialkylaminoalkyl, wherein said C_1-C_5 alkyl is selected from the group consisting of a straight chain, branched or cyclic alkyl;

wherein R_3, X, and Y are independently selected from the group consisting of H, halogen, alkoxy, substituted alkoxy, alkyl, substituted alkyl, dialkylaminoalkyl, hydroxyalkyl, OH, OCH_3, COOH, CN, CF_3, OCF_3, NO_2, COOR", CHO, and COR";

wherein R_1 and R_2 are independently selected from the group consisting of H, alkyl, substituted alkyl, C_3-C_9 cycloalkyl, substituted C_3-C_9 cycloalkyl, polycyclic aliphatic groups, phenyl, substituted phenyl, naphthyl, substituted naphthyl, heterocyclic, and substituted heterocyclic, wherein said heterocyclic and said substituted heterocyclic contain 1-3 heteroatoms, wherein said heteroatom is independently selected from the group consisting of nitrogen, oxygen and sulfur;

wherein said substituents are selected from the group consisting of H, halogen, alkoxy, substituted alkoxy, alkyl, substituted alkyl, dialkylaminoalkyl, hydroxyalkyl, OH, OCH_3, COOH, COOR′ COR′, CN, CF_3, OCF_3, NO_2, NR′R′, NHCOR′ and CONR′R′;

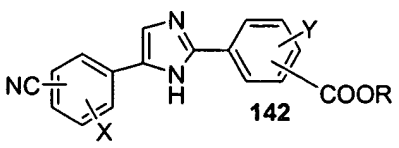
wherein R′ is selected from the group consisting of H, alkyl, substituted alkyl, C_3-C_9 cycloalkyl, substituted C_3-C_9 cycloalkyl, polycyclic aliphatic groups, phenyl, substituted phenyl, naphthyl, substituted naphthyl, heteroaryl and substituted heteroaryl, wherein said heteroaryl and said substituted heteroaryl contain 1-3 heteroatoms, wherein said heteroatom is independently selected from the group consisting of nitrogen, oxygen and sulfur; and

wherein R" is selected from the group consisting of C_1-C_9 alkyl, wherein said C_1-C_9 alkyl is selected from the group consisting of straight chain alkyl, branched alkyl, and cyclic alkyl;

wherein said method comprises the following steps:

converting a Y-substituted-alkoxycarbonyl-benzonitrile to a Y-substituted alkoxycarbonyl-benzamidine;

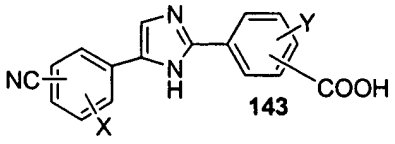
reacting the Y-substituted alkoxycarbonyl-benzamidine with X-substituted cyano-phenacyl halide to form a species of the formula **142**



142

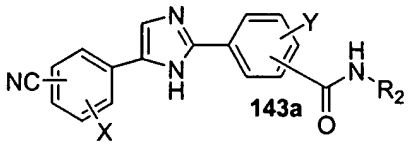
;

hydrolyzing the species of the formula **142** to form a species of the formula



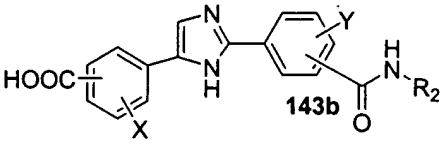
143 ;

amidating the species of the formula **143** to form a species of the formula



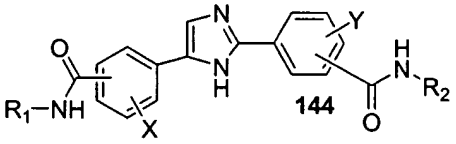
143a ;

hydrolyzing the species of the formula **143a** to form a species of the formula



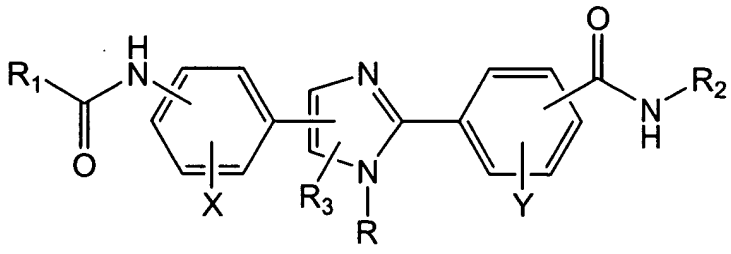
143b ; and

amidating the species of the formula **143b** to form a species of the formula



144 .

32. A method of preparing a compound or salt thereof having the formula:



Genus 4;

wherein R is selected from the group consisting of H, C_1-C_5 alkyl, benzyl, p-fluorobenzyl, and dialkylaminoalkyl, wherein said C_1-C_5 alkyl is selected from the group consisting of a straight chain, branched or cyclic alkyl;

wherein R_3, X, and Y are independently selected from the group consisting of H, halogen, alkoxy, substituted alkoxy, alkyl, substituted alkyl, dialkylaminoalkyl, hydroxyalkyl, OH, OCH_3, COOH, CN, CF_3, OCF_3, NO_2, COOR", CHO, and COR";

wherein R_1 and R_2 are independently selected from the group consisting of H, alkyl, substituted alkyl, C_3-C_9 cycloalkyl, substituted C_3-C_9 cycloalkyl, polycyclic aliphatic groups, phenyl, substituted phenyl, naphthyl, substituted naphthyl, heterocyclic, and substituted heterocyclic, wherein said heterocyclic and said substituted heterocyclic contain 1-3 heteroatoms, wherein said heteroatom is independently selected from the group consisting of nitrogen, oxygen and sulfur;

wherein said substituents are selected from the group consisting of H, halogen, alkoxy, substituted alkoxy, alkyl, substituted alkyl, dialkylaminoalkyl, hydroxyalkyl, OH, OCH_3, COOH, COOR′ COR′, CN, CF_3, OCF_3, NO_2, NR′R′, NHCOR′ and CONR′R′;

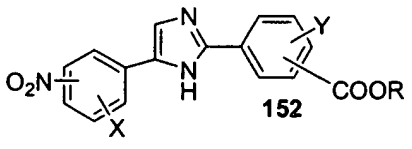
wherein R′ is selected from the group consisting of H, alkyl, substituted alkyl, C_3-C_9 cycloalkyl, substituted C_3-C_9 cycloalkyl, polycyclic aliphatic groups, phenyl, substituted phenyl, naphthyl, substituted naphthyl, heteroaryl and substituted heteroaryl, wherein said heteroaryl and said substituted heteroaryl contain 1-3 heteroatoms, wherein said heteroatom is independently selected from the group consisting of nitrogen, oxygen and sulfur; and

wherein R" is selected from the group consisting of C_1-C_9 alkyl, wherein said C_1-C_9 alkyl is selected from the group consisting of straight chain alkyl, branched alkyl, and cyclic alkyl;

wherein said method comprises the following steps:

converting a Y-substituted-alkoxycarbonyl-benzonitrile to a Y-substituted alkoxycarbonyl-benzamidine;

reacting the Y-substituted alkoxycarbonyl-benzamidine with X-substituted nitro-phenacyl halide to form a species of the formula **152**



152

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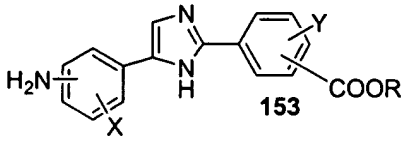
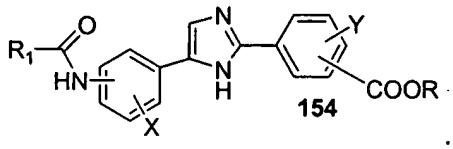
reducing the species of the formula **152** to form a species of the formula **153**



153

;

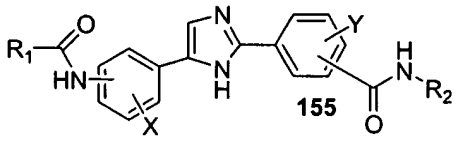
acylating the species of the formula **153** to form a species of the formula **154**



154

; and

amidating the species of the formula **154** to form a species of the formula **155**



155

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